Nicolas Dean Basil

Work Experience

Test Lab Technician — *Toray Composite Materials America, Inc.*   **2018-present**
- Perform chemical, physical, mechanical, and thermal tests on aerospace-grade composite materials and for new material qualifications
    - Including DSC, DMA, HPLC, FTIR spectroscopy, rheology, moisture content, flammability, etc.
- Prepare samples, run tests, analyze and interpret data, and review test reports for raw materials, intermediate polymer resins, aerospace-grade carbon fiber prepreg, and cured laminate specimens
- Complete monthly and daily calibrations and verifications for lab instruments
- Program tools in collaboration with lab engineers to integrate Laboratory Information Management System (LIMS) into the new Manufacturing Execution System (MES)
- Troubleshoot laboratory instrument and process breakdowns to improve existing standardized procedures and develop new, more efficient processes
- Communicate with engineers from the Technical Department and scientists from the internal research lab to collaborate on cross-functional test requests requiring non-standard test reports from the Test Lab
- Designed multiple new time-saving procedures, including streamlining specimen conditioning organization and automating FTIR report creation with VBA (3x faster)
- Analyze foreign object debris/damage (FOD) and write final reports in response to customer complaints

Environmental Lab Technician — *TestAmerica Inc.*   **2017-2018**
- Performed organic extractions according to Environmental Protection Agency methods
- Used proprietary LIMS to check backlog, create batches, fill out internal chain of custody, and write non-conformance memos

Education

University of Washington — *Seattle, WA*   **2013-2017**
- Bachelor of Science in Chemistry, Biochemistry
- Minor in Applied Mathematics

Professional/Technical Skills

- Diverse technical background with expertise in many analytical and testing protocols, including optical microscopy, multi-component analysis by liquid chromatography, and viscosity testing
- Possess strong understanding of lab safety, 5S, Lean Manufacturing, and aerospace quality assurance practices
- Experience with many technical computer programs and with a variety of programming languages
    - Proficient in Visual Basic for Applications (VBA), MATLAB, and HTML/CSS
    - Familiar with SQL, R, and Java
- Highly proficient with Microsoft Office program suite
    - Microsoft Excel and Word Expert Certified; PowerPoint and Access Core Certified
    - Utilize macros and formulas in Excel to automate repetitive work and increase productivity
- Extremely detail-oriented, dedicated, and persistent with creative solutions to problems
- Adept computer navigation skills, troubleshooting abilities, and technical knowledge
- Passionate about learning, always improving myself, and working hard until a job is complete

Leadership Experience

Vice President of Undergraduate Student Ministry Team — *UW Catholic Newman Center*   **2016-2017**
- Led and supported all programs and events sponsored by 45-person team